

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

In the Matter of:

MDEQ Docket No. AO-RRD-07-001

Former Smiths Industries Facility  
Eastern Avenue, S.E.  
Wyoming, Kent County, Michigan

Respondent.

Proceeding under Section 20119 of Part 201, Environmental Remediation, of the  
Natural Resources and Environmental Protection Act, 1994 PA 451, as amended,  
MCL 324.20119.

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**ADMINISTRATIVE ORDER FOR RESPONSE ACTIVITY**

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### INDEX

I.	JURISDICTION .....	1
II.	PARTIES BOUND .....	1
III.	DEFINITIONS.....	1
IV.	FINDINGS OF FACT AND DETERMINATIONS .....	4
V.	ORDER .....	8
VI.	ACCESS.....	14
VII.	QUALITY ASSURANCE/SAMPLING .....	16
VIII.	RECORD RETENTION/ACCESS TO INFORMATION .....	17
IX.	EMERGENCY RESPONSE .....	19
X.	PROJECT COORDINATORS AND COMMUNICATIONS/NOTICES.....	20
XI.	SUBMISSIONS AND APPROVALS .....	21
XII.	COMPLIANCE WITH OTHER LAWS .....	22
XIII.	AMENDMENTS/MODIFICATIONS/INCORPORATION BY REFERENCE .....	23
XIV.	PENALTIES FOR NONCOMPLIANCE .....	23
XV.	DISCLAIMERS .....	23
XVI.	RESERVATION OF RIGHTS BY THE MDEQ .....	24
XVII.	RESPONDENT'S INTENT TO COMPLY WITH THIS ORDER.....	24
XVIII.	OPPORTUNITY TO CONFER .....	25
XIX.	SEVERABILITY.....	25
XX.	EFFECTIVE DATE .....	25

ATTACHMENT A – PROPERTY DESCRIPTION

ATTACHMENT B – MONITOR AND PURGE WELLS FOR SAMPLING

## **I. JURISDICTION**

This Administrative Order (Order) is issued pursuant to the authority vested in the Michigan Department of Environmental Quality (MDEQ) by Section 20119 of Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), MCL 324.20119.

## **II. PARTIES BOUND**

This Order shall apply to and be binding upon Smiths Aerospace, L.L.C. (Smiths), and its successors. No change in ownership or company/corporate status shall in any way alter Smiths' responsibilities under this Order. Smiths shall provide a copy of this Order to all contractors, subcontractors, laboratories, and consultants that are retained to conduct any portion of the response activities to be performed pursuant to this Order within three (3) days of the effective date of such retention. Notwithstanding the terms of any such contract, Smiths is responsible for compliance with the terms of this Order, and shall ensure that such contractors, subcontractors, laboratories, and consultants perform all response activities in conformance with the terms and conditions of this Order.

## **III. DEFINITIONS**

3.1 "Day" means a calendar day, unless otherwise specified in this Order.

3.2 "Effective Date" means the date the MDEQ Director issues this Order. All dates for the performance of obligations under this Order shall be calculated from the Effective Date.

3.3 "Former Smiths Industries Facility" or the "Facility" means the Property identified in Attachment A and any area, place, or property where a hazardous substance which originated at the Property and is emanating or has emanated from the Property and is present at concentrations that exceed the cleanup criteria established

pursuant to Section 20120a(1)(a) or other requirements provided in Section 20120a(17) of the NREPA, MCL 324.20120a(1)(a) or (17), or the cleanup criteria for unrestricted residential use under Part 213, Leaking Underground Storage Tanks, of the NREPA, has been released, deposited, or disposed of, or has otherwise come to be located.

3.4 “Former Smiths Industries Property” or “Property” means the real property legally described in Attachment A, and, at the time of Smiths’ ownership, generally referenced as being located at 4141 Eastern Avenue, SE, Wyoming, Kent County, Michigan.

3.5 “IRA” means interim response activity as defined in Section 20101(1)(u) of the NREPA and the Part 201 Administrative Rules, and specifically provided in Paragraph 5.2(b) of this Order.

3.6 “MDAG” means the Michigan Department of Attorney General, its successor entities, and those authorized persons or entities acting on its behalf.

3.7 “MDEQ” means the Michigan Department of Environmental Quality, its successor entities, and those authorized persons or entities acting on its behalf.

3.8 “Off-site” means property not identified in Attachment A.

3.9 “Order” means this Administrative Order, No. AO-RRD-07-001, issued to Respondent to perform response activities relating to the Former Smiths Industries Facility.

3.10 “Part 201” means Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), MCL 324.20101 et seq., and the Part 201 Administrative Rules promulgated thereunder.

3.11 "Part 201 Administrative Rules" means the Part 201 Administrative Rules effective on December 21, 2002, that were promulgated under Part 201 of the NREPA, and any rules promulgated in the future pursuant to Part 201.

3.12 "Parties" means Smiths Aerospace, L.L.C., and the State.

3.13 "Remedial action," as defined in Section 20101(1)(cc), includes but is not limited to, cleanup, removal, containment, isolation, destruction, or treatment of a hazardous substance released or threatened to be released into the environment, monitoring, maintenance, or the taking of other actions that may be necessary to prevent, minimize, or mitigate injury to the public health, safety, or welfare, or to the environment.

3.14 "RAP" means a remedial action plan, as defined in Section 20101(1)(dd) of the NREPA, described in the Part 201 Administrative Rules, and that meets the requirements of Sections 20118, 20119, 20120a, 20120b, and 20120d of the NREPA.

3.15 "RI" means a remedial investigation that meets the requirements of the Part 201 Administrative Rules and Paragraph 5.1(a) of this Order.

3.16 "Response activity," as defined in Section 20101(1)(ee) of the NREPA, means evaluation, interim response activity, remedial action, demolition, or the taking of other actions necessary to protect the public health, safety, or welfare, or the environment. Response activity also includes health assessments or health effect studies carried out under the supervision, or with the approval of the Michigan Department of Community Health and enforcement actions related to any response activity.

3.17 "RRD" means the Remediation and Redevelopment Division of the MDEQ and its successor entities.

3.18 "Respondent" or "Smiths" means Smiths Aerospace, L.L.C.

3.19 "State" and "State of Michigan" mean the MDAG and the MDEQ, and any authorized representatives acting on their behalf.

3.20 "Submissions" or means all plans, reports, schedules, and other submittals that Respondent is requested to submit to the MDEQ pursuant to this Order.

3.21 Unless otherwise stated herein, all terms used in this Order, which are defined in Part 3, Definitions, of the NREPA, MCL 324.301; Part 201 of the NREPA, MCL 324.20101, et seq.; or the Part 201 Administrative Rules, shall have the same meaning in this document as in Parts 3 and 201 of the NREPA and the Part 201 Administrative Rules.

#### **IV. FINDINGS OF FACT AND DETERMINATIONS**

4.1 The Facility is located on Eastern Avenue, S.E., Wyoming, Kent County, Michigan, encompassing approximately 50 acres, between 40<sup>th</sup> and 44<sup>th</sup> Streets.

4.2 Smiths, and its predecessors owned the Facility from the early 1950s until September 1992. According to Michigan Department of Labor and Economic Growth records, Smiths conducts aerospace and defense design and manufactures aerospace instruments, and has an active status to do business in Michigan. Prior to Smiths' ownership, the Property had been agricultural. Smiths is a "person" as that term is defined in Section 301(g) of the NREPA, MCL 324.301(g).

4.3 On December 2, 1982, Smiths reported to the MDEQ a release of spent plating acids. A waste acid storage tank for a plating line developed a leak.

4.4 During a 1983 investigation of the waste acid release on the southwestern portion of the Property, chlorinated solvents, primarily tetrachloroethylene (PCE) and

trichloroethylene (TCE), were discovered in the groundwater at the Facility. Smiths used chlorinated solvents, including PCE and TCE, at the Property. A "release" within the meaning of Section 20101(1)(bb) of the NREPA occurred at the Property.

4.5 A second hydrogeological investigation on the southwestern portion of the Property was performed in 1989, and the source of the chlorinated solvents was attributed to a release from an underground storage tank (UST) located west of the manufacturing building. This was a different UST than the waste acid tank from which the original release occurred.

4.6 Smiths installed a purge and treat system in September 1991 to capture and remediate the groundwater at the Facility, and operated, maintained and monitored the system until the Property was sold in 1997.

4.7 On October 31, 1997, Smiths sold the Property to National RE/sources Eastern LLC (National).

4.8 In 2000, National removed impacted soils and, in 2004, began operating a Total Fluids Extraction/Air Sparge remediation system, a type of soil remediation system, at the Property.

4.9 National, or an associated entity, discontinued operation of the soil and groundwater remediation systems on or around June 29, 2007.

4.10 The Facility is a "facility" as that term is defined in Section 20101(1)(o) of the NREPA. "Hazardous substances," as that term is defined in Section 20101(1)(t) of the NREPA, including TCE and PCE, have been released at the Property in excess of the concentrations which satisfy the requirements of Section 20120a(1)(a) or (17) of the NREPA or the cleanup criteria for unrestricted residential use under Part 213, Leaking Underground Storage Tanks, of the NREPA.

4.11 Smiths is a person that is liable within the meaning of Section 20126(1)(a) of the NREPA.

a. Smiths was an owner and operator of the Facility at the time of release or disposal of hazardous substances at the Facility, and is responsible for an activity causing a release of hazardous substances into the environment.

b. The hazardous substances present in soils and groundwater at the Facility are consistent with what was released by Smiths.

4.12 The actual releases of hazardous substances at or from the Facility may pose an imminent and substantial endangerment to public health, safety, welfare, or the environment within the meaning of Section 20119 of the NREPA. Based on environmental investigations conducted at the Facility by Smiths and National, and Baseline Environmental Assessments conducted by subsequent owners and operators between 1999 and 2006, it has been determined that:

a. Soils in the area west of the manufacturing building at the Facility are highly contaminated, including concentrations of PCE exceeding direct contact criteria.

(1) Concentrations of PCE as high as 16 million parts per billion (ppb) have been identified in the soils between the manufacturing building and the Heyboer Drain on the Property. This is over 180 times higher than the soil saturation concentrations and the direct contact criteria, and 160,000 times greater than the drinking water protection criteria for soils established pursuant to Section 20120a(1)(a) of the NREPA for soils. This PCE concentration in the soils also exceeds indoor and ambient air criteria.

(2) Concentrations of TCE as high as 2,100 ppb have been identified in the soils between the manufacturing building and the Heyboer Drain on the Property. This is 21 times the drinking water protection criteria established pursuant to Section 20120a(1)(a) of the NREPA for soils.

(3) Chlorinated solvent contamination was discovered in a vault within the manufacturing building. The vault and proximate impacted soils were removed, but contamination in excess of acceptable levels may still be present.



(4) Both TCE and PCE were discovered to have impacted soils in more than one area on the Property, and are suspected carcinogens that may cause liver disease or lung cancer. Skin contact for short periods may cause rashes.

b. Groundwater in the area west of the manufacturing building at the Facility is highly contaminated, including concentrations that exceed direct contact criteria for PCE.

(1) Concentrations of PCE as high as 14,000 ppb have been identified in groundwater between the manufacturing building and the Heyboer Drain on the Property. This is 2,000 times higher than the groundwater contact criteria and 2,800 times greater than the drinking water protection criteria established pursuant to Section 20120a(1)(a) of the NREPA for groundwater.

(2) PCE concentrations present in monitor well MW-20, and purge wells PW-1 and PW-2 along the east bank of the Heyboer Drain exceed final acute values (FAV) provided in Rule 323.1057 of Part 4, Water Quality Standards, promulgated under Part 31, Water Resources Protection, of the NREPA. Discontinuation of the groundwater remediation system will likely allow discharges to the drain of groundwater that exceeds FAV, potentially causing injury to aquatic animal species in the surface water and sediments.

(3) Concentrations of TCE as high as 2,300 ppb have been identified in the groundwater between the manufacturing building and the Heyboer Drain on the Property. This is 460 times higher than the drinking water protection criteria established pursuant to Section 20120a(1)(a) of the NREPA for groundwater.

(4) Drinking groundwater containing large amounts of TCE or PCE may cause nausea, liver damage, unconsciousness, impaired hearing function, or death.

c. Soils on the northern portion of the Property have been impacted by chlorinated solvents, reportedly from Smiths historic practice of washing down aircraft and metals that discharged to a former dry well and septic system.

(1) Concentrations of PCE as high as 760 ppb has been identified in the soils in the area where aircraft were washed down historically, exceeding the Part 201 generic residential criteria.

(2) Metals, including silver at 88,000 ppb, and arsenic at 32,000 ppb, are present in excess of the Part 201 generic residential criteria.

d. Groundwater on the northern portion of the Property has been impacted by chlorinated solvents reportedly from Smiths' historic practice of washing down aircraft, with PCE as high as 3,400 ppb, and TCE as high as 690 ppb.

## **V. ORDER**

**RESPONDENT IS HEREBY ORDERED to perform the response activities and other actions set forth in this Order, based upon the Section IV, Findings of Fact and Determinations.**

### **5.1 Performance Objectives**

Respondent shall: (a) conduct a remedial investigation of the Facility that fulfills the performance objectives of Paragraph 5.1(a) of this Order; (b) perform the IRAs required in Paragraph 5.1(b) of this Order, and demonstrate and document the effectiveness of the implemented IRAs as provided in Paragraph 5.2 of this Order; and (c) submit to the MDEQ, and receive approval for, a RAP as required in Paragraphs 5.1(b) and 5.2(d) of this Order that, when fully implemented, (i) is protective of human health, safety, welfare and the environment, (ii) will achieve the cleanup criteria specified in Part 201, and (iii) ensures the effectiveness and integrity of the remedial objective as proposed in the RAP. Respondent shall comply with the requirements of Part 201 and meet the performance objectives specified in this Paragraph 5.1 of this Order with respect to the Smiths Industries Facility.

a. A remedial investigation of site conditions shall be conducted at the Facility as provided in Rules 299.5528 and 299.5536(1)(a) of the Part 201 Administrative Rules, including areas used for hazardous substance storage, handling, transfer, transport, and disposal identified to the extent practical from available information and inquiry, in order to select an appropriate remedial action that addresses those conditions to protect the public health, safety, welfare, and the environment

consistent with Part 201. The objectives of this investigation include, but are not limited to, the following:

- (1) Defining the source or sources of all hazardous substance contamination at and emanating from the Property.
- (2) Defining the nature, amount, concentration, hazardous properties, environmental fate, persistence, mobility, and physical state of the hazardous substance contamination present at the Facility.
- (3) Determining the relevant exposure pathways.
- (4) Defining the amount, concentration, hazardous properties, environmental fate, persistence, location, mobility, and physical state of the hazardous substances present at the Facility.
- (5) Defining the extent, including the three dimensional distribution, to which hazardous substances in the soil, groundwater and sediments have migrated or are expected to migrate from all areas of release, including off the Property and the potential for hazardous substances to migrate along preferential pathways, such as storm drains and sewer systems. This includes, but is not limited to, evaluation of migration of hazardous substance contamination through or along the storm water drainage systems serving the Property, including discharges to and impacts on the Heyboer Drain and migration along sanitary sewer systems and utility corridors.
- (6) Defining the geology, hydrogeology, groundwater flow, and hydraulic gradients within each identified area of release(s) at the Facility, and their relationships to the migration and fate of contamination.
- (7) Determining current and potential groundwater use.

b. IRAs shall be performed as follows:

- (1) Within thirty (30) days of the Effective Date of this Order:
  - (a) obtain access to the Property to operate and maintain the existing groundwater and soil remediation systems, and
  - (b) commence operation and maintenance of the existing groundwater and soil remediation systems installed at the Property as they were designed. The MDEQ may amend this Order if Smiths fails or is unable to obtain authorization for the discharge of treated groundwater extracted from the existing

groundwater remediation system within thirty (30) days of the Effective Date of this Order.

(2) Within sixty (60) days of the Effective Date of this Order, collect and analyze groundwater samples from the monitor wells listed in Appendix B using the full United States Environmental Protection Agency's (USEPA's or EPA's) EPA Method 8260 volatile organic compound (VOC) scan. After this initial sampling, collect and analyze groundwater samples from the monitor wells and purge wells listed in Appendix B, using the full EPA Method 8260 VOC scan on a quarterly basis until a RAP for the Facility has been approved by the MDEQ.

(3) Within sixty (60) days of the Effective Date of this Order and semi-annually thereafter, until a RAP for the Facility has been approved by the MDEQ, collect and analyze surface water samples from the Heyboer Drain at staff gauges upgradient and downgradient locations, SW-4 and SW-3, respectively, using the full EPA Method 8260 VOC scan.

(4) Within nine (9) months of the Effective Date of this Order, upgrade or replace, as appropriate, the existing groundwater remediation system or implement other response activities, as necessary, to halt illegal discharges to the Heyboer Drain from the Property.

(5) At any time during the pendency of this Order, if reasonably recoverable free phase liquids are discovered, source control measures shall be implemented on an ongoing basis within ten (10) days of discovery.

c. A RAP shall be developed that when fully implemented has the remedial objective of effectively mitigating all releases of hazardous substances in all environmental media for each area of release identified at the Facility consistent with Sections 20118, 20120a, 20120b, and 20120d of the NREPA; and the Part 201 Administrative Rules. The RAP shall include, but is not limited to, the following:

(1) Identifying which of the pathways, risks, and conditions set forth in Rule 532(7) of the Part 201 Administrative Rules are relevant for the Facility, including an analysis of source control measures as required by Section 20118(8) of the NREPA.

(2) Documenting that the cleanup criteria in the RAP are appropriate to the facility, considering land use, activity patterns anticipated at the facility, and other factors that affect the appropriateness of the criteria for a facility. This documentation shall include identification of any wellhead protection zone that may be affected by the facility.

(3) Identifying the category of cleanup criteria that is being proposed or relied upon at the Facility.

(4) Assuring that, when fully implemented, the effectiveness and integrity of the remedial action is provided for in the MDEQ-approved RAP.

(5) Obtaining all necessary permits, including a permit authorizing the discharge of water from the groundwater treatment system to the surface water and/or obtaining or renewing a permit exemption for a surface water mixing zone, if applicable.

(6) Documenting that, when implemented, the identified remedial objective can be achieved by meeting the cleanup criteria established under Section 20120a of the NREPA, and complying with all applicable technical and administrative requirements of Sections 20118, 20120a, 20120b, and 20120d of the NREPA; and the Part 201 Administrative Rules.

(7) Allowing for the continued use of the Property consistent with local zoning.

## 5.2 Submissions

The Respondent shall provide the MDEQ the following submissions:

a. Within ninety (90) days after the Effective Date of this Order and quarterly thereafter, until a RAP for the Facility has been approved by the MDEQ, Respondent shall submit a Performance Monitoring Report to the MDEQ for review. The Performance Monitoring Report shall document the operational status and effectiveness of the existing treatment systems, the operational problems encountered, the activities conducted to resolve those problems, all performance monitoring data pursuant to all permits, and the monitored environmental conditions for the three (3)-month period preceding the report.

b. Within ninety (90) days after the Effective Date of this Order, and quarterly thereafter, until a RAP for the Facility has been approved by the MDEQ, Respondent shall submit a Progress Report to the MDEQ for review. The Progress Report shall document how the remedial investigation and IRA performance objectives of Paragraph 5.1(a) and (b) of this Order are being met, including:

(1) A description of the objectives of the response activity and how they were or will be achieved;

(2) A detailed description of the response activity undertaken during the preceding three (3) months, including all data that is relevant to the conclusions drawn. Information supplied shall include sufficient documentation of the nature and extent of contamination to support any conclusions about the effectiveness of the response activity;

(3) A schedule for implementation of the activities proposed for the next quarter.

c. Within one (1) year of the Effective Date of this Order, Respondent shall provide to the MDEQ for review and comment a preliminary submittal that will be incorporated into the RAP for the Facility, which contains the following elements:

(1) A remedial investigation report for the Facility that includes the information required by Rule 528(3) of the Part 201 Administrative Rules and the performance objectives of Section 5.1(a) of this Order.

(2) The remedial objective that will be proposed in the RAP, as reflected by the selection of categorical cleanup criteria under Section 20120a(1) or site specific cleanup criteria under Section 20120(2) of the NREPA, which together with applicable technical and administrative requirements, shall result in compliance at the Facility with Sections 20118, 20120a, 20120b, and 20120d of the NREPA; and the Part 201 Administrative Rules.

(3) A plan for obtaining access, as described in Section 6.2 of this Order, to any properties not owned or controlled by Respondent that is needed to perform the response activities to be contained in the RAP. If Respondent proposes to perform a remedial action that relies on the cleanup criteria established under

Section 20120a(1)(b) through (j) or (2) of the NREPA and that RAP will provide for land and resource use restrictions, monitoring, operation and maintenance, or permanent markers as prescribed by Section 20120b(3)(a) through (d) of the NREPA, Respondent shall include documentation from property owners or local units of government that the necessary access to these properties has been or will be obtained and that any proposed land or resource use restrictions can or will be placed or enacted.

(4) A detailed description of the specific work tasks to be conducted; a description of how these work tasks will achieve the remedial objective identified in Paragraph 5.1(c)(iii) of this Order and the following Part 201 Administrative Rules: Rule 532(1), (6) through (8), (11)(a through h), (11)(j), and (11)(k); Rule 538; Rule 540; Rule 705 (1), (5), and (6); and Rules 706 through 752; and a description and supporting documentation of how the results of the remedial investigation or other response activities that have been performed at the Facility support the selection of the remedial action to be contained in the RAP.

(5) Implementation schedules for conducting the response activities and for submission of RAP progress reports and a RAP Closure Report.

(6) A description of the nature and amount of waste materials expected to be generated during the performance of response activities and the name and location of the facilities Respondent proposes to use for the off-site transfer, storage, treatment, or disposal of those waste materials.

d. Within four (4) months after Respondent's receipt of the MDEQ's comments on the preliminary submittal described above, Respondent shall submit a RAP for the Facility to the MDEQ for review and approval. The RAP shall meet the performance objectives in Paragraph 5.1 of this Order; include a detailed schedule for implementation of the response activities contained in the RAP; and include any engineering design plans and construction plans necessary to implement the response activity. The RAP shall be subject to the MDEQ review and approval in accordance with Section XI (Submissions and Approvals) of this order.

## VI. ACCESS

6.1 Upon the Effective Date of this Order and to the extent access to the Facility, and any associated property owned, controlled by, or available to Respondent, the MDEQ, its authorized employees, agents, representatives, contractors, and consultants, upon presentation of proper credentials and providing reasonable notice to Respondent, shall have access at all reasonable times to the Facility, and any associated property for the purpose of conducting any activity to which access is required for the implementation of this Order or to otherwise fulfill any responsibility under federal or State law with respect to the Facility, including, but not limited to:

- a. Monitoring response activities or any other activities taking place pursuant to this Order at the Facility;
- b. Verifying any data or information submitted to the MDEQ;
- c. Conducting investigations relating to contamination at or near the Facility;
- d. Obtaining samples;
- e. Assessing the need for or planning or conducting response activities at or near the Facility;
- f. Assessing compliance with requirements for the performance of monitoring, operation and maintenance, or other measures necessary to assure the effectiveness and integrity of the interim response activities;
- g. Inspecting and copying non-privileged records, operating logs, contracts or other documents;
- h. Communicating with Respondent's Project Coordinators or other personnel, representatives, or consultants for the purpose of assessing compliance with this Order;
- i. Determining whether the Facility is being used in a manner that is prohibited or restricted, or that may need to be prohibited or restricted, by or pursuant to this Order; and
- j. Assuring the protection of public health, safety, and welfare and the environment.



6.2 To the extent that the Facility is owned or controlled by persons other than Respondent, Respondent shall use its best efforts to secure from such persons access for the Parties and their authorized employees, agents, representatives, contractors, and consultants. Respondent shall provide the MDEQ with a copy of each access agreement secured pursuant to this section. For purposes of this paragraph, "best efforts" include, but are not limited to, providing compensation acceptable to the owner or taking judicial action to secure such access. If judicial action is required to obtain access, Respondent shall provide documentation to the MDEQ that such judicial action has been filed in a court of appropriate jurisdiction no later than sixty (60) days after Respondent's receipt of the MDEQ's approval of the work plan for which such access is needed. If Respondent has not been able to obtain access within sixty (60) days after filing judicial action, Respondent shall promptly notify the MDEQ of the status of all efforts to obtain access and provide an assessment of how any delay in obtaining access may affect the performance of response activities for which the access is needed.

6.3 Any lease, purchase, contract, or other agreement entered into by Respondent, which transfers to another person a right of control over the Facility shall contain a provision preserving for the MDEQ or any other person undertaking the response activities and their authorized representatives, the access provided under this Section VI (Access) and Section VIII (Record Retention/Access to Information) of this Order.

6.4 Any person granted access to the Facility where the response activities are to be performed by Respondent under this Order shall comply with all applicable health and safety laws and regulations.

6.5 Notwithstanding any provision of this Order, the MDEQ shall retain all of its information gathering, inspection, enforcement, and access authorities under Part 201 of the NREPA and any applicable statute or regulation.

## **VII. QUALITY ASSURANCE/SAMPLING**

### **7.1 Quality Assurance Sampling and Analytical Requirements**

Sampling and analytical activities shall be developed and performed in accordance with the EPA's "EPA Requirements for Quality Assurance Project Plans," EPA QA/R-5, March 2001; "Guidance for Quality Assurance Project Plans," EPA QA/G-5, December 2002; and "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs," American National Standard ANSI/ASQC E4-1994. Respondent shall utilize recommended sampling methods and analytical methods and analytical detection levels specified in RRD's "Operational Memo No. 2, Sampling and Analysis," dated October 22, 2004 and revised July 5, 2007, including all applicable attachments. Respondent shall utilize the MDEQ's "2002 Sampling Strategies and Statistics Training Materials for Part 201 Cleanup Criteria" to determine the number of samples collected for the purposes of verifying the cleanup. Respondent shall follow the protocol and guidance in the above documents or documents that supercede or amend these documents, or Respondent may utilize other methods demonstrated by the Respondent to be appropriate, if submitted to and approved by the MDEQ.

7.2 All sampling and analysis conducted pursuant to this Order shall follow the methodologies specified in Paragraph 7.1 of this Order; the rules promulgated under Part 31, Water Resources Protection, of the NREPA; and guidance provided by the MDEQ on sampling locations, collection methods, parameters, detection limits, and analytical methods.

7.3 Respondent, or their consultants or subcontractors, shall provide the MDEQ a fourteen (14)-day notice prior to any sampling activity to be conducted pursuant to this Order to allow the RRD Project Coordinator, or his or her authorized representative, the opportunity to take split or duplicate samples, to take additional samples, or to observe the sampling procedures. In circumstances where a fourteen (14)-day notice is not possible, Respondent, or their consultants or

subcontractors, shall provide notice of the planned sampling activity as soon as possible to the RRD Project Coordinator and explain why earlier notification was not possible. If the RRD Project Coordinator concurs with the explanation provided, Respondent may forego the fourteen (14)-day notification period for that particular sampling event.

7.4 Respondent shall provide the MDEQ with the results of all environmental sampling and other analytical data generated regarding the Facility in the performance or monitoring of any requirement under this Order included in Parts: 31; 111, Hazardous Waste Management; 115, Solid Waste Management; 201; 211, Underground Storage Tank Regulations; or 213 of the NREPA; or other relevant authorities in a timely manner. Said results shall be included in the quarterly Progress Reports and the RAP.

7.5 For the purpose of quality assurance monitoring, Respondent shall assure that the MDEQ and its authorized representatives are allowed access to any laboratory that is used by Respondent in implementing this Order.

## **VIII. RECORD RETENTION/ACCESS TO INFORMATION**

8.1 Respondent and its representatives, consultants, and contractors shall preserve and retain, during the pendency of this Order and for a period of ten (10) years after RAP approval, all records, electronic documents or databases, sampling or test results, charts, and other documents relating to historical hazardous substance disposal, treatment, or handling activities at the Facility, or that are maintained or generated pursuant to any requirement of this Order. After the ten (10)-year period of document retention, Respondent and its successors shall obtain the MDEQ's written permission prior to the destruction of such documents and, upon request, Respondent and/or successors shall relinquish custody of all documents to the MDEQ. Respondent requests shall be accompanied by a copy of this Order and sent to the following address:

Chief  
Remediation and Redevelopment Division  
Michigan Department of Environmental Quality  
P.O. Box 30426  
Lansing, Michigan 48909-7926

8.2 Upon request, Respondent shall provide to the MDEQ copies of all documents and information within its possession, or within the possession or control of its employees, contractors, agents or representatives relating to the response activities at the Facility or to the implementation of this Order, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information related to the response activities. Respondent shall also, upon request, make available to the MDEQ, upon reasonable notice, Respondent employees, contractors, agents, or representatives with knowledge of the relevant facts concerning the performance of the response activities.

8.3 If Respondent submits to the MDEQ documents or information that Respondent believes is entitled to protection as provided for in Section 20117(10) and (11) of the NREPA, Respondent may designate in that submittal the documents or information to which it believes are entitled such protection. If no such designation accompanies the information when it is submitted to the MDEQ, the information may be made available to the public by the MDEQ without further notice to Respondent. Information described in Section 20117(11)(a) through (h) of the NREPA shall not be claimed as confidential or privileged by Respondent. Information or data generated under this Order shall not be subject to Part 148, Environmental Audit Privilege and Immunity, of the NREPA, MCL 324.14801 et seq.

## **IX. EMERGENCY RESPONSE**

9.1 If, during the pendency of this Order, an act or the occurrence of an event causes a release or threat of release of a hazardous substance at or from the Facility or causes exacerbation of existing contamination at the Facility, and the release, threat of release, or exacerbation poses or threatens to pose an imminent and substantial endangerment to public health, safety, or welfare, or the environment, Respondent shall immediately undertake all appropriate actions to prevent, abate, or minimize such release, threat of release, exacerbation, or endangerment; and shall immediately notify the MDEQ Project Coordinator. In the event of his or her unavailability, Respondent shall notify the Pollution Emergency Alerting System (PEAS) at 1-800-292-4706. In such an event, any actions taken by Respondent shall be in accordance with all applicable health and safety laws and regulations.

9.2 Within ten (10) days of notifying the MDEQ of such an act or event, Respondent shall submit a written report setting forth a description of the act or event that occurred and the measures taken or to be taken to mitigate any release, threat of release, exacerbation, or endangerment caused or threatened by the act or event and any action to prevent recurrence of such an act or event. If an act or event causes a release, threat of release, or exacerbation, or poses or threatens to pose an imminent and substantial endangerment to public health, safety, or welfare, or the environment, the MDEQ may: (a) require Respondent to stop response activities at the Facility for such period of time as may be needed to prevent or abate any such release, threat of release, exacerbation, or endangerment; (b) require Respondent to undertake any actions that the MDEQ determines are necessary to prevent or abate any such release, threat of release, exacerbation, or endangerment; or (c) undertake any actions that the MDEQ determines are necessary to prevent or abate such release, threat of release, exacerbation, or endangerment.

## **X. PROJECT COORDINATORS AND COMMUNICATIONS/NOTICES**

10.1 Within thirty (30) days of the Effective Date of this Order, Respondent shall designate and provide contact information to a project coordinator who shall have primary responsibility for overseeing the performance of the response activities at the Facility and other requirements specified in this Order for Respondent. The MDEQ Project Coordinator shall be Mr. Paul Knoerr, who can be contacted as follows:

Mr. Paul Knoerr, Project Coordinator  
Grand Rapids District Office  
Remediation and Redevelopment Division  
Michigan Department of Environmental Quality  
350 Ottawa Avenue NW, Unit 10  
Grand Rapids, Michigan 49503-2341  
Telephone: 616-356-0624  
Facsimile: 616-356-0202

The MDEQ Project Coordinator will be the primary designated representative for the MDEQ for the Facility. Whenever notices are required to be given or progress reports, information on the collection and analysis of samples, sampling data, work plan submittals, approvals or disapprovals, or other technical submissions are required to be forwarded by one party to the other party under this Order, or whenever other communications between the Parties are needed, such communications shall be directed to the MDEQ Project Coordinator at the address listed above. If any party changes its designated Project Coordinator, the name, address, and telephone number of the successor shall be provided to the other Party, in writing, as soon as practical.

10.2 The MDEQ may designate other authorized representatives, employees, contractors and consultants to observe and monitor the progress of any activity undertaken pursuant to this Order.

10.3 This paragraph does not relieve Respondent from other reporting obligations under applicable state and federal laws and regulations.

## **XI. SUBMISSIONS AND APPROVALS**

11.1 All Submissions required by this Order shall comply with all applicable laws and regulations and the requirements of this Order, and shall be delivered to the MDEQ in accordance with the schedules set forth in this Order. All Submissions delivered to the MDEQ pursuant to this Order shall include a reference to the Former Smiths Industries Facility and MDEQ Reference No. AO-RRD-07-001. Any Submission delivered to the MDEQ for approval also shall be marked "Draft" and shall include, in a prominent location in the document, the following disclaimer:

Disclaimer: This document is a DRAFT document that has not received final approval from the Michigan Department of Environmental Quality (MDEQ). This document was prepared pursuant to a governmental administrative order. The opinions, findings, and conclusions expressed are those of the authors and not those of the MDEQ.

11.2 Upon review of the RAP, the RRD Chief will in writing: (a) approve the RAP; (b) reject the RAP as insufficient if it lacks any information necessary or required by the MDEQ to make a decision; or (c) deny approval of the RAP. If the MDEQ denies approval of the RAP, it will provide Respondent with a complete and specific statement of the conditions or requirements necessary to obtain approval.

11.3 Within ninety (90) days after receipt of a rejection or denial of approval of a RAP from the MDEQ pursuant to Paragraph 11.2(b) or (c) of this Order, Respondent shall resubmit the RAP to the MDEQ for review and approval. The time period for resubmission of the RAP may be extended by the MDEQ. The MDEQ will review the resubmitted RAP in accordance with the procedure stated in Paragraph 11.2 of this Order. If the MDEQ does not approve the RAP upon resubmission, the MDEQ will so advise Respondent, and the MDEQ will deem Respondent to be in violation of this Order.

11.4 If the initial submittal of any Submission contains significant deficiencies such that the Submission is not in the judgment of the MDEQ a good faith effort by

Respondent to deliver an acceptable Submission that complies with Part 201 and this Order, the MDEQ will notify Respondent of such and will deem Respondent to be in violation of this Order. Any other delay in the delivery of a Submission, noncompliance with a Submission or attachment to this Order, or failure to cure a deficiency of a Submission in accordance with this section, may also place Respondent in violation of this Order. Violation of this Order may subject Respondent to penalties for noncompliance as provided in Section XIV (Penalties for NonCompliance) of the Order or to other remedies available to the State.

11.5 Upon approval by the MDEQ, any Submission and attachments to Submissions required by this Order shall be considered part of this Order and are enforceable pursuant to the terms of this Order. If there is a conflict between the requirements of this Order and any Submission or an attachment to a Submission, the requirements of this Order shall prevail.

11.6 An approval shall not be construed to mean that the MDEQ concurs with any of the conclusions, methods, or statements in any Submission or warrants that the Submission comports with law.

11.7 Informal advice, guidance, suggestions, or comments by the MDEQ regarding any Submission provided by Respondent shall not be construed as relieving Respondent of its obligation to obtain any formal approval required under this Order.

## **XII. COMPLIANCE WITH OTHER LAWS**

All actions required to be taken pursuant to this Order shall be undertaken in accordance with the requirements of all applicable or relevant and appropriate state and federal laws and regulations, including but not limited to Parts 31 and 201 of the NREPA, and laws relating to occupational safety and health, and other state environmental laws. Other agencies may also be called upon to review the conduct of response activities under this Order.



### **XIII. AMENDMENTS/MODIFICATIONS/INCORPORATION BY REFERENCE**

This Order may only be amended in writing by signature of the Director of the MDEQ or his or her authorized representative. Modification of the provisions in Paragraph 5.2 of this Order, or any other required response activity, may be modified by the RRD Chief or his or her authorized representative.

### **XIV. PENALTIES FOR NONCOMPLIANCE**

Pursuant to Sections 20119(4) and 20137(1) of the NREPA, MCL 324.20119(4) and MCL 324.20137(1), Respondent is advised that if, without sufficient cause, Respondent violates or fails to satisfactorily comply with this Order, or any portion thereof, Respondent may be: (a) fined in a civil action brought in circuit court up to twenty-five thousand dollars (\$25,000) for each day in which such violation occurs or such failure to comply continues; and/or (b) subject to liability for exemplary damages in the amount of three (3) times the amount of any costs incurred by the State of Michigan as a result of Respondent's violation or failure to comply with this Order.

### **XV. DISCLAIMERS**

The State of Michigan, including the MDEQ and its employees, agents and consultants, shall not be liable for injuries or damages to persons or property resulting from acts or omissions by Respondent, their officers, employees, agents, or contractor(s) in carrying out activities pursuant to this Order. The State of Michigan, including the MDEQ, shall not be held as a party to any contract entered into by Respondent or their officers, employees, agents, or contractor(s) in carrying out activities pursuant to this Order.

## **XVI. RESERVATION OF RIGHTS BY THE MDEQ**

16.1 The MDEQ expressly reserves all rights and defenses that it may have, to request or order Respondent to perform response activities in addition to those detailed in this Order. In addition, the MDEQ reserves the right to undertake response activities at any time and to perform any and all portions of the response activities required by this Order that Respondent have failed or refused to perform properly or promptly. The MDEQ, in cooperation with the MDAG, reserves any and all rights to take any enforcement action pursuant to Part 201, or any other available legal authority, including the right to seek injunctive relief, monetary costs, damages or penalties, or punitive damages for any violation of law or of this Order.

16.2 Nothing in this Order shall be deemed to limit the power and authority of the MDEQ or the State of Michigan to take, direct, or order all appropriate action to protect the public health, welfare, or the environment or to prevent, abate or minimize a release or threatened release of hazardous substances, pollutants, contaminants, or hazardous wastes on, at, or from the Facility.

## **XVII. RESPONDENT'S INTENT TO COMPLY WITH THIS ORDER**

In accordance with Section 20119(3) of the NREPA, MCL 324.20119(3), Respondent is advised that within thirty (30) days of the Effective Date of this Order, Respondent is required to indicate to the MDEQ in writing whether or not the Respondent intends to comply with this Order to:

Mr. Andrew W. Hogarth, Chief  
Remediation and Redevelopment Division  
Michigan Department of Environmental Quality  
P.O. Box 30426  
Lansing, Michigan 48909-7926

Via Courier

Mr. Andrew W. Hogarth, Chief  
Remediation and Redevelopment Division  
Michigan Department of Environmental Quality  
Constitution Hall, 4<sup>th</sup> Floor, South Tower  
525 West Allegan Street  
Lansing, Michigan 48933-1502

**XVIII. OPPORTUNITY TO CONFER**

Respondent may, by orally notifying the MDEQ Project Coordinator within seven (7) days after receipt of this Order, request a conference with the MDEQ to discuss the correctness of any factual determinations upon which the Order is based, the applicability of this Order to Respondent, and the appropriateness of any action Respondent is ordered to take. If Respondent requests a conference, such conference shall be held either Monday, September 10, 2007; or Monday, September 17, 2007. At any conference held pursuant to Respondent's request, Respondent may appear in person or through an attorney or other representative for the purpose of orally presenting any objections, defenses or contentions that Respondent may have regarding this Order, provided that such presentations shall not be a part of the administrative record upon which this Order is based.

**XIX. SEVERABILITY**

The provisions of this Order shall be severable. If any provision of this Order is declared by a court of competent jurisdiction to be inconsistent with state law, and therefore unenforceable, the remaining provisions of this Order shall remain in full force and effect.

**XX. EFFECTIVE DATE**

This Order is effective on the date of its issuance.

IT IS SO ORDERED BY:

Issued at Lansing, Michigan, this 28 day of August, 2007.



Steven E. Chester, Director  
Michigan Department of Environmental Quality

APPROVED AS TO FORM:



Kathleen L. Cavanaugh (P38006)  
Assistant Attorney General  
Environment, Natural Resources, and Agriculture Division  
Michigan Department of Attorney General

Date: 8-16-07

**ATTACHMENT A**  
Property Description

Exhibit "A"

Part of the SE 1/4, Section 19, T6N, R11W, City of Wyoming, Kent County, Michigan, described as: Commencing at the E 1/4 corner of Section 19; thence S 02 degrees 55 minutes 30 seconds E 658.46 feet along the East line of Section 19 to the place of beginning of this description; thence S 02 degrees 55 minutes 30 seconds E 517.10 feet along said East line; thence S 87 degrees 04 minutes 00 seconds W 190.37 feet; thence N 02 degrees 55 minutes 30 seconds W 17.00 feet; thence S 87 degrees 04 minutes 00 seconds W 765.00 feet to the Easterly line of Kent Industrial Center No. 2; thence N 06 degrees 00 minutes 00 seconds W 496.08 feet along said Easterly line; thence N 87 degrees 04 minutes 00 seconds E 336.21 feet; thence N 85 degrees 24 minutes 20 seconds E 556.04 feet; thence S 02 degrees 55 minutes 30 seconds E 14.00 feet; thence N 85 degrees 24 minutes 20 seconds E 90.00 feet to the place of beginning.

Subject to and together with a Reciprocal Access Easement Agreement described as:

That part of Lots 15 and 16, Potter Plat and Part of Lot 73, Kent Industrial Center No. 2 and that part of the E 1/2, Section 19, T6N, R11W, City of Wyoming and City of Kentwood, Kent County, Michigan, described as: Commencing at the E 1/4 corner of Section 19; thence N 89 degrees 33 minutes W 625.00 feet along the South line of 40th Street to the Place of Beginning of this easement; thence S 00 degrees 27 minutes W 66.00 feet; thence N 89 degrees 33 minutes W 301.35 feet; thence Southwesterly 33.67 feet along a 20.0 foot radius curve to the left, the chord of which bears S 42 degrees 13 minutes 30 seconds W 29.83 feet; thence S 06 degrees 00 minutes E 1887.54 feet along a line which is parallel with and 66 feet Easterly from the Easterly line of Kent Industrial Center No. 2; thence S 03 degrees 05 minutes E 259.98 feet to the South line of Lot 15 of Potter Plat; thence S 89 degrees 51 minutes 45 seconds W 53.05 feet along said South line and its extension to the Easterly line of Kent Industrial Center No. 2; thence S 89 degrees 50 minutes 40 seconds W 13.04 feet to an angle point on the Easterly line of Lot 73 of Kent Industrial Center No. 2; thence N 03 degrees 05 minutes W 254.91 feet; thence N 06 degrees 00 minutes W 1982.13 feet along the Easterly line of Kent Industrial Center No. 2 to the South line of Allen Farm Plat; thence S 89 degrees 33 minutes E 397.62 feet along said South line to the place of beginning.

Subject to an Environmental Access Easement Agreement described as:

Lots 1, 2, 15 and 16 of Potter Plat, and part of Lot 73, Kent Industrial Center No. 2 and that part of the E 1/2, Section 19, T6N, R11W, City of Kentwood, and City of Wyoming, Kent County, Michigan, described as: Beginning at a point on the East line of Section 19 which is S 02 degrees 55 minutes 30 seconds E 1175.56 feet from the

E 1/4 corner of Section 19; thence S 02 degrees 55 minutes 30 Seconds E 809.87 feet along the East Section line of Section 19; thence S 89 degrees 51 minutes 45 seconds W 50.06 feet along the extended North line of 43rd Street (now vacated); thence S 02 degrees 55 minutes 30 seconds E 33.04 feet along the West line of Eastern Avenue; thence N 89 degrees 51 minutes 45 seconds E 17.02 feet to the NE corner of Lot 1, Potter Plat as originally platted; thence S 02 degrees 55 minutes 30 seconds E 200.00 feet to the SE corner of Lot 2 of Potter Plat; thence S 89 degrees 51 minutes 45 seconds W 868.82 feet along the South line of Lots 2 and 15 and its extension to the Easterly line of Kent Industrial Center No. 2; thence S 89 degrees 50 minutes 40 seconds W 13.04 feet to an angle point on the Easterly line of Lot 73 of Kent Industrial Center No. 2; thence S 02 degrees 56 minutes 10 seconds E 34.33 feet to the SE corner of said Lot 73; thence S 89 degrees 50 minutes 40 seconds W 115.80 feet along the South line of Lot 73; thence N 06 degrees 00 minutes W 376.61 feet to the North line of Lot 73; thence N 89 degrees 55 minutes E 130.70 feet to the NE corner of Lot 73; thence N 06 degrees 00 minutes W 675.40 feet along the Easterly line of Kent Industrial Center No. 2; thence N 87 degrees 04 minutes 00 seconds E 765.00 feet; thence S 02 degrees 55 minutes 30 seconds E 17.00 feet; thence N 87 degrees 04 minutes 00 seconds E 190.37 feet to the place of beginning.

Subject to and together with a Joint Access Easement Agreement described as:

Part of the SE 1/4, Section 19, T6N, R11W, City of Wyoming, Kent County, Michigan, described as: Commencing at the E 1/4 corner of Section 19; thence S 02 degrees 55 minutes 30 seconds E 632.00 feet along the East line of said SE 1/4 to the Place of Beginning of this description; thence S 02 degrees 55 minutes 30 seconds E 26.46 feet along said East line; thence S 85 degrees 24 minutes 20 seconds W 90.00 feet; thence N 02 degrees 55 minutes 30 seconds W 29.07 feet; thence N 87 degrees 04 minutes 00 seconds E 89.96 feet to the place of beginning;

Also, that part of the SE 1/4, Section 19, T6N, R11W, City of Wyoming, Kent County, Michigan, described as: Commencing at the E 1/4 corner of Section 19; thence S 02 degrees 55 minutes 30 seconds E 632.00 feet along the East line of said SE 1/4; thence S 87 degrees 04 minutes 00 seconds W 89.96 feet to the Place of Beginning of this description; thence S 02 degrees 55 minutes 30 seconds E 15.07 feet; thence S 85 degrees 24 minutes 20 seconds W 79.07 feet; thence N 02 degrees 55 minutes 30 seconds W 17.36 feet; thence N 87 degrees 04 minutes 00 seconds E 79.04 feet to the place of beginning.

## **ATTACHMENT B**

### **Monitor and Purge Wells for Sampling**

Groundwater shall be collected annually pursuant to this Order from the following:

Monitor wells:

MW-2, MW-4, MW-5, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, MW-16,  
MW-17, MW-18, MW-20, MW-21, MW-22, MW-23, MW-24, MW-26, MW-28, MW-29

Purge wells:

PW-1 to PW-15, PW-20, PW-22, and PW-23